

# Unit 49: Specialist Illustration Using Computer Applications

<b>Unit code:</b>	<b>A/502/5353</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>10</b>
<b>Guided learning hours:</b>	<b>60</b>

## ● Aim and purpose

In this unit, learners will develop their understanding and skills of the varied uses for digital illustrations and the purposes they serve within graphic media products.

## ● Unit introduction

In the graphic, print and digital media industries appropriate, detailed imagery for use in a wide variety of products is always in demand. In graphic media products such as websites and instruction leaflets, clear, relevant illustrative imagery is an important element of the communication process. Therefore, a competency in digital illustration is a highly prized attribute that can lead to a range of employment opportunities.

Whilst traditional drawing skills and an understanding of the theory behind effective illustration are required for a digital illustrator to succeed, this must come coupled with a confident grasp of the technology and equipment that those working in the field are required to operate. This unit will address both of these areas, and requires learners to demonstrate their understanding and skill in the field, developing and broadening their skills base.

Learners will also investigate the work of others, considering the qualities important to effective illustration and gaining an understanding of methods used to ensure intentions and messages are communicated clearly. Learners will need to put the understanding they have gained in to practise through the application of their own skills, producing illustrations for a designated purpose.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 Be able to research the use of digital illustration with reference to the work of others
- 2 Be able to use digital illustration packages to produce illustrative graphics
- 3 Understand own digital illustration work

# Unit content

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## 1 Be able to research the use of digital illustration with reference to the work of others

*Research:* eg view existing material, source examples, analyse, evaluate

*Uses for digital illustration:* for information eg instruction manuals, leaflets, manuals, magazines, journals; for demonstration, eg mechanical diagrams, biological depiction, developmental, concept product depiction, cut-aways of systems, workings

*Purposes of digital illustration:* eg decoration, embellishment, exemplification, technical drawing, demonstration of internal workings

## 2 Be able to use digital illustration packages to produce illustrative graphics

*Use digital illustration packages:* use of tools eg selection, shape creation, text input, line creation, warping, magnification; media selection eg pen, pencil, paint; object transformation eg scaling, rotating; object attribute assignment eg transparency, fill, stroke, alignment; use of layers eg creation of layers, layer management, layer opacity; line creation eg use of paths, anchor points; image formats eg jpg, gif, TIFF, eps; use of peripheral equipment eg mouse, scanner, digital drawing tablets; file storage options eg hard-drive, memory stick, CD, online data storage

*Illustrative graphics:* for an identified purpose eg diagrams, demonstrative imagery, mechanical workings, instructive imagery, concept drawing, cut-aways

## 3 Understand own digital illustration work

*Discuss:* process; production eg order of work, process followed, materials, techniques; achievement eg successes, failures, technical issues; refer to work of others eg comparisons, inspiration, influences

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> research the use of digital illustration, referring to the work of others [IE]	<b>M1</b> purposefully research the use of digital illustration with reference to the work of others reaching coherent conclusion	<b>D1</b> independently and perceptively research the use of digital illustration with reference to the work of others
<b>P2</b> use digital illustration packages to produce illustrative graphics [CT]	<b>M2</b> purposefully use digital illustration packages to produce effective illustrative graphics	<b>D2</b> independently use digital illustration packages to produce imaginative and original illustrative graphics
<b>P3</b> discuss own digital illustration work. [RL]	<b>M3</b> coherently discuss own digital illustration work.	<b>D3</b> perceptively discuss own digital illustration work.

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

# Essential guidance for tutors

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## Delivery

This unit allows learners to gain an understanding of the uses and purposes of digital illustration. Through this analysis and development of practical work learners will gain the skills required to produce such items. The learner should be able to discuss his or her own work and working practices effectively.

For learning outcome 1 learners will need to access, evaluate and explore the way in which illustration is used to aid communication and convey information in a range of media products. Tutor input should focus on the use and purpose of digital illustration. This may take the form of discussion about a product containing illustration and group analysis of its purpose. A tutor-led presentation, as shown in Assignment 1 in the *Outline Learning Plan* would provide a basis for learners to explore the informative, decorative and communicative purposes of such products. More advanced learners may be encouraged to consider in more depth the choice of illustration over written communication and build their skills of visual analysis by breaking down the way in which illustration has been created and implemented. Learners should continue their investigations independently, perhaps with guidance from a tutor regarding their focus. Providing a bank of products featuring illustration and the names of prominent practitioners will be of use in guiding learners towards the right kind of research. Products, which are informative or instructional in nature, may provide more scope for the analysis of use and purpose than, for example, illustrated fiction.

Learners may work towards building a portfolio containing annotated examples of found work, information about particular companies or practitioners and comment on the use of illustration in general. For assessment purposes learners could present this portfolio as a presentation to the group, discussing their findings and expanding upon the information discovered. Other methods of assessment that may be suitable for this would include a video or audio diary of progress through the exploration process, a blog of their findings with links to relevant resources or a written or verbal report on their research.

For learning outcome 2 learners will need to apply the knowledge gained from exploring the work of others to effectively demonstrate their own skills using appropriate digital illustration packages and applications. Assignment 2 demonstrates a structure for delivering this outcome. Learners will need to grasp all aspects of such software well, in order to meet the requirements of the unit. Learning outcome 2 demands a great deal of coverage in terms of operation and utilisation of digital illustration graphic packages. Tutors are strongly advised to spend a good proportion of their delivery time focussing carefully on ensuring learners have a very good grasp of these skills. In order for learners to aim towards independent operation of such packages, as is required by the distinction grade criterion related to this element of the unit, they will need plenty of hands-on guidance and support at this stage of their skill development. It would be advisable to run delivery of this element of the course by a system of demonstration of practice.

Many tutors find providing written instruction to support their delivery is essential as an aide-memoire for learners as they progress through this stage. Whilst it is often useful to tutors, it is not advisable to provide learners with material direct from software manufacturer manuals, as these often assume a higher level of understanding than learners at this stage possess.

When learners are progressing through the skill development phase of their work, they may be advised to collect screen-grabs or visual evidence of the processes and procedures they practise in order to remind themselves when working on their own project.

Learners need to produce illustrations utilising the skills they have learned in delivery. These illustrations need to be produced for a defined purpose. An assignment brief that provides a suitable vocational scenario or situation for learners to work towards is recommended. Learners will need to be able to identify the purpose of their work and how they are working towards it, so collation of screenshots of work in progress and perhaps a diary of decisions made would be advisable.

For learning outcome 3 learners will need to be able to discuss their own achievements, analysing and evaluating success and failure in their intended endeavours. Learners will need to document all progress and keep records of their completion of a brief. They will need visual evidence of their practical processes as well as an ability to discuss the decisions made and evaluate their achievement. Learner will need to present their resolved work, accompanied by discussion which could be verbal or written, and comments on how their work relates to the work of other practitioners. This could be conducted on a one-to-one or group basis and take verbal or written forms, dependent on the preferred style of the learner.

## Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Group introduction to unit and structure of the programme.
<b>Assignment 1:</b> Research into Digital Illustration
Tutor presentation on digital illustration. Learners make notes and collect visual reference materials. Compile information. Present ideas – report/presentation at group crit. Assessment – interim grade.
<b>Assignment 2:</b> The Digital Illustration Brief
Read through and group discussion. Individual tutorial/action planning.
Stage 1 – learners develop ideas for project: <ul style="list-style-type: none"> <li>• outline subject matter for project</li> <li>• identify sources</li> <li>• undertake any required research</li> <li>• develop ideas for project</li> <li>• present ideas for project.</li> </ul>
Learner initiated study.
Stage 2 – learners use digital technologies: <ul style="list-style-type: none"> <li>• identify equipment required for production</li> <li>• identify hardware/software required</li> <li>• use digital equipment safely</li> <li>• capture and store digital imagery correctly.</li> </ul>
Learner initiated study.
Stage 3 – learners complete project: <ul style="list-style-type: none"> <li>• undertake required digital production methods</li> <li>• burn discs/DVD's as required</li> <li>• present all files, paperwork and production file for assessment.</li> </ul>
Learner initiated study.
Review of unit and assessment.

## Assessment

For P1, learners should present a body of work which evidences their investigations into and findings regarding digital illustration within existing products. Their work should show they have an understanding of the uses for and purposes of illustration and that they can apply this to examples from their findings. At pass level, the coverage of knowledge may not extend far beyond description of several uses for illustration and some evidence of understanding of the purposes it serves, supported by a couple of relevant examples. However, work should go beyond brief lists and referenced work must be appropriate and description of use and purpose accurate.

For P2, learners will need to produce their own resolved digital illustrations. Learners will need to demonstrate and evidence their skills through the production of more than one example of their work. Work presented for assessment should be finished, completed images. Learner work may lack technical finesse and could be slightly aesthetically flawed. It must, however, be relevant to its identified purpose and demonstrate a grasp of the packages or software utilised. Pass-level learners may have required assistance and support in the creation of their resolved work, but this will not have been constant or intense supervision.

For P3, learners should demonstrate the knowledge gained from both the investigation of and the production of digital illustrations to discuss their own resolved work. The evidence for this may take many forms but must document a learner's ability to discuss their work, covering a description of how their work was completed, the successes and failures experienced during the production of their work and the suitability of the finished piece. Work should move slightly beyond basic description at this level, with learners describing the processes they experienced and the nature of their own work, bringing in some evaluation of quality and fulfilment of the brief.

For M1, learners should present a body of work which evidences their careful investigations into, and findings regarding, digital illustration within existing products. Their work should show they have a good understanding of the uses for and purposes of illustration and that they can confidently apply this to examples from their findings. At merit level, the coverage of knowledge should extend beyond description and move on to explaining the way in which illustration is used and the purposes that it serves and why. Learners should be able to discuss the advantage of using visual imagery over other forms of communication. Work should cover relevant references to types or forms of digital illustration and the practice of others.

For M2, learner work should demonstrate a good level of technical ability, but may lack a great deal of innovation or experimentation with tools or processes. Work should be aesthetically appropriate and show a good understanding of the eventual purpose of the work and therefore, the requirements of it. Work should be highly relevant to its identified purpose and demonstrate a good grasp of the packages or software utilised. Merit-level learners may have required occasional assistance and support in the creation of their resolved work, but this will not have been a regular occurrence and they will have had some confidence in applying their skills independently.

For M3, learners need to coherently explain their work, describing the creative and practical decisions made and some coverage of the reasoning behind them. The successes and failures experienced during the production of their work and the suitability of the finished piece should be explained in some depth. Work should move slightly into reasoning and explanation at this level, with learners discussing the processes they experienced and the nature of their own work, bringing in clearly reasoned evaluation of quality and fulfilment of the brief.

For D1, learners should present a body of work which evidences their detailed investigations into, and findings regarding, digital illustration within existing products. Their work should show they have a comprehensive understanding of the uses for and purposes of illustration and that they can confidently apply this to examples from their findings. The coverage of knowledge should extend to the justification of how illustration is used and the purposes that it serves and why. Learners should be able to discuss the advantage of using visual imagery over other forms of communication. Work should cover relevant references to types or forms of digital illustration and the practice of others.

For D2 learners should independently use digital illustration packages to produce imaginative and original illustrative graphics. They will demonstrate a sound understanding of the principles of the purpose of their illustrative work, and be able to articulate the methods and design decisions they have made to produce their outcome. Use of software and technical considerations will be at a consistently high standard, showing control over media and equipment that they have managed independently.

For D3, learners must show ability to critically evaluate and examine their work and process, justifying the creative and practical decisions made and detailing the reasoning behind them. The successes and failures experienced during the production of their work should be assessed and examined and the suitability of the finished piece should be explained comprehensively. Work, at this level, should show an ability to analyse and evaluate work in depth, with regular, appropriate reference to professional practice and the work of other practitioners.

### Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
PI, M1, D1	<b>Assignment 1:</b> Research into Digital Illustration	An illustrator intends to move from operating using purely traditional wet based media to incorporating digital media and is researching the field of digital based illustration.	Portfolio of evidence consisting of: <ul style="list-style-type: none"> <li>work journals, containing notes</li> <li>learners' own research work</li> <li>learners presentation of research conclusions.</li> </ul>
P2, P3. M2, M3 D2, D3	<b>Assignment 2:</b> The Digital Illustration Brief	An illustrator is exploring a theme in their work through applying different combinations of digital techniques and processes.	Portfolio of evidence consisting of: <ul style="list-style-type: none"> <li>work journals, containing initial ideas</li> <li>work journals, containing proposal for project</li> <li>learners' use of digital technologies in sourcing, capturing, manipulating and outputting digital illustration files</li> <li>tutor observation of studio practice</li> <li>learners' practical work and final outcomes</li> <li>learners' review of working practices and outcomes</li> <li>presentation and discussion at close of assignment.</li> </ul>

## Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Introduction to Graphic Materials, Techniques and Processes	Working with Digital Art and Design Briefs	Visual Recording in Art and Design
Introduction to Creative Use of Computers	Working with Graphic Design Briefs	Design Methods in Art and Design
Introduction to Creative Drawing	Working with Photography Briefs	Image Manipulation Computer Applications

### National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

#### CCSkills Sector Skills Council

Design (revisions in draft form June 2009)

- DES1 Apply research on the history and theory of design to your own design activities
- DES2 Apply design industry knowledge to inform your own design work practice and work
- DES3 Use Critical Thinking Techniques in your design work
- DES4 Communicate the importance of the design brief
- DES5 Follow a design process
- DES14 Explore the history and social impact of creativity and how it can influence your own design work
- DES15 Research and evaluate the nature of design in a specific industry context
- DES18 Interpret the design brief and follow the design process
- DES21 Articulate, present and debate ideas in a creative environment
- DES23 Create 2D Designs using a Computer Aided Design System
- DES24 Create 3D Models using a Computer Aided Design System
- DES28 Developing your own design offer
- DES32 Apply concepts and theories of creativity and innovation to your own design work
- DES36 Develop and extend your design skills and practices
- DES38 Manage design realisation
- DES39 Manage a design project

## Skillset Sector Skills Council

### Photo Imaging

- D1 Create Original Artwork for Digital Images
- D2 Carry Out Specified Image Scanning
- D3 Plan and Produce Scanned Images
- D4 Carry Out Specified Image Editing
- D5 Plan and Produce Edited Images
- D6 Prepare for, and Produce, Image Output
- D7 Contribute to the Effectiveness of Imaging Activities
- D8 Send and Receive Image Data Files by Digital Means
- D11 Edit Images Using a Digital Processing Station

## Essential resources

Centres will need access to a range of existing illustrated resources such as leaflets, instruction manuals, magazines, journals, informative literature, books etc for initial analysis and evaluation.

Learners will need access to digital illustration packages and associated hardware and peripherals. Learners will need prolonged individual access to packages and equipment and this should be taken in to careful consideration by the centre. After initial delivery learners will need considerable time to practise their skills. Where possible learners should have access to subject-specific peripherals such as digital graphics tablets in order to give them a fully vocational experience of working in the field. Colour printing facilities must also be made available to learners in the final stages of their work on resolved pieces.

## Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – [www.vocationallearning.org.uk](http://www.vocationallearning.org.uk)

Business and finance advice:

- local and regional Business Link – [www.businesslink.gov.uk](http://www.businesslink.gov.uk)

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.

Creative and cultural skills ([www.ccskills.org.uk](http://www.ccskills.org.uk)), the sector skills council for arts, crafts and design have launched the web portal Creative Choices ([www.creative-choices.co.uk](http://www.creative-choices.co.uk)). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

## Indicative reading for learners

### Textbooks

Gordon B and Gordon M – *The Complete Guide to Graphic Design* (Thames & Hudson, 2005)  
ISBN 978-0500285602

Klanten R and Hellige H – *Illusive: Contemporary Illustration and its Context* (Die Gestalten Verlag published biennially last edition, 2009) ISBN 978-3899552508

Kolle I – *Graphics Tablet Solutions* (Muska & Lipman, 2001) ISBN 978-1929685141

Walsh Macario J – *Graphic Design Essentials: Skills, Software and Creative Solutions* (Laurence King, 2009)  
ISBN 978-1856695992

Zeegan L – *Digital Illustration: A Masterclass in Digital Image-Making* (RotoVision, 2005)  
ISBN 978-2880467975

Zeegan L – *The Fundamentals of Illustration: How to Generate Ideas, Interpret Briefs and Promote Oneself* (Ava Publishing, 2005) ISBN 978-2884790604

### Journals

*an magazine* – The Artists Information Company

*Design Week* – Centaur Communications Ltd

*Digit* – IDG Publishing

### Websites

[www.adobe.com](http://www.adobe.com)

Art and design computer software

[www.computerarts.co.uk](http://www.computerarts.co.uk)

Computer Arts magazine website

[www.computerillustration.co.uk](http://www.computerillustration.co.uk)

Website of freelance computer illustrator

[www.digitmag.co.uk](http://www.digitmag.co.uk)

Links and news on digital media

[www.flickr.com](http://www.flickr.com)

Image sharing website

[www.good-tutorials.com](http://www.good-tutorials.com)

Tutorials on digital media

[www.northkingdom.com](http://www.northkingdom.com)

Swedish interactive design company

[www.nsead.org/ict/index.aspx](http://www.nsead.org/ict/index.aspx)

Case studies, examples of practice and links, related to new media and education in art and design

## Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
<b>Independent enquirers</b>	researching different examples of digital illustration pursuing own research on ways digital illustration is applied in industry
<b>Creative thinkers</b>	develop design ideas for the brief using digital technologies
<b>Reflective learners</b>	evaluating own digital illustration.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
<b>Independent enquirers</b>	reviewing the work of others in more detail and considering the digital techniques they have used
<b>Creative thinkers</b>	applying combinations of techniques when developing practical project work
<b>Reflective learners</b>	listening to the views of others in group critiques
<b>Self-managers</b>	managing the production of digital illustration work
<b>Effective participators</b>	contributing to discussion group.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	using digital input methods
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	reviewing digital work
Manage information storage to enable efficient retrieval	storing and retrieving work
Follow and understand the need for safety and security practices	using tools and equipment in the course of their study
Troubleshoot	problem solving connectivity issues
<b>ICT – Find and select information</b>	
Select and use a variety of sources of information independently for a complex task	sourcing digital files and information from on line tutorials
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	sourcing information from websites and electronic publications about digital illustration
<b>ICT – Develop, present and communicate information</b>	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> <li>• text and tables</li> <li>• images</li> <li>• numbers</li> <li>• records</li> </ul>	preparing images as part of the brief
Bring together information to suit content and purpose	illustrating technical texts
Present information in ways that are fit for purpose and audience	considering audience for work
Evaluate the selection and use of ICT tools and facilities used to present information	choosing the best processes and tools for the brief
<b>Mathematics</b>	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	analysing data to be illustrated for brief

Skill	When learners are ...
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	presenting and discussing work
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	sourcing and reading information about digital illustration reading and absorbing information about health and safety relating to peripherals/equipment to be used
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively.	gathering and recording relevant technical information about equipment compiling information from reviews or client presentations.